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04/22/07 (LC 0136 PUS)

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In the claims:

1. (Currently Amended) An active keyed locking system for a vehicle comprising:
 - a fixed position sensor statically generating a magnetic field;
 - a keyed actuated device comprising a field altering device; said a keyed actuated device altering said magnetic coupled to said field when placed in proximity thereto, said fixed altering device;
 - a non-mechanically operated position sensor proximate to said keyed actuated device and generating a position signal indicative of the rotational position of said keyed actuated device based on the alteration of said statically generated magnetic field in response to detected change in a magnetic field due to rotation of said field altering device about an axis extending through said field altering device; and
 - a controller electrically coupled to said position sensor and enabling at least one vehicle component in response to said position signal.
2. (Original) A system as in claim 1 wherein said keyed actuated device is a lock assembly.
3. (Original) A system as in claim 1 wherein said keyed actuated device is a key.
4. (Original) A system as in claim 3 wherein said key comprises a signal generator generating a transmission signal.
5. (Original) A system as in claim 3 wherein said key comprises a field-altering device.
6. (Original) A system as in claim 3 wherein said key comprises a magnetic device.
7. (Original) A system as in claim 3 wherein said key comprises:
 - a coil; and
 - a transponder coupled to said coil and generating a transmission signal.

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8. (Original) A system as in claim 3 wherein said key generates an authorization signal, said controller enabling at least one vehicle component in response to said authorization signal.

9. (Original) A system as in claim 1 wherein said position sensor is selected from at least one of a series of magnets, a coil, a potentiometer, an encoder, an optical sensor, an infrared sensor, a hall effect sensor, a rotary variable differential transformer, a rotary variable inductance transducer, an angular position sensor, or a resolver.

10. (Original) A system as in claim 1 wherein said position sensor is coupled within a base station.

11. (Original) A system as in claim 1 wherein said controller enables a vehicle component selected from at least one of a vehicle accessory, an ignition, a door lock, and a vehicle system in response to said position signal.

12. (Original) A system as in claim 1 further comprising a recognition device recognizing a key and generating a recognition signal wherein said controller enables the active keyed locking system in response to said recognition signal.

13. (Original) A system as in claim 1 wherein said keyed actuated device is a lock assembly, said lock assembly comprising a key antenna.

14. (Currently Amended) An ignition enabling system for a vehicle comprising:

a lock assembly;

a fixed position sensor statically generating an electric field;

a key having a transponder and engageable with said lock assembly such that rotation of said key within said lock assembly enables said transponder to alter said electric field, said fixed position sensor generating a position signal indicative of the rotational position of said key based on the alteration of said statically generated electric field; and

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~~a position sensor sensing position of said key, in response to a change in an electric field proximate said lock assembly due to actuation of said transponder about an axis extending through said transponder, and generating a position signal indicative of said position; and~~

a controller electrically coupled to said position sensor and enabling at least one vehicle component in response to said position signal.

15. (Currently Amended) A method of enabling at least one vehicle component through use of an active keyed locking system comprising:

statistically generating a ~~actuating a keyed actuated device to alter a~~ magnetic field using a fixed ~~generated by a~~ position sensor;

rotating a key actuated device within said magnetic field, said key actuating device including a field altering device;

monitoring alterations in said statically generated magnetic fields using said fixed position sensor;

determining the rotational position of said keyed actuated device using ~~a in response to detected change in said magnetic field and generating a~~ position signal generated by said fixed position sensor, said position signal changing in response to said alterations in said statically generated magnetic field; and

enabling the at least one vehicle component in response to said position signal.

16. (Original) A method as in claim 15 further comprising:

recognizing a key and generating a recognition signal; and

enabling an active keyed locking system in response to said recognition signal.

17. (Original) A method as in claim 16 further comprising activating a base station in response to said key recognition.

18. (Original) A method as in claim 15 further comprising:

generating a first authorization signal;

generating a second authorization signal in response to said first

authorization signal.

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verifying said second authorization signal; and

generating said position signal in response to said verification.

19. (Original) A method as in claim 15 wherein determining position of said keyed actuated device comprises:

generating at least one base signal;

altering said at least one base signal via actuation of said keyed actuated device; and

generating said position signal in response to said alteration of said at least one base signal.

20. (Original) A method as in claim 19 wherein said at least one base signal is modulated using a modulation technique selected from at least one of amplitude modulation, frequency modulation, and phase modulation.